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# Medial rectus rupture; a rare condition with an unusual presentation

P A Bloom FRCS FCOphth R Harrad FRCS FCOphth Department of Ophthalmology, Bristol Eye Hospital, Lower Maudlin Street, Bristol BS1 2LX

Keywords: medial rectus rupture; eye injury; traumatic ophthalmoplegia

We describe an atypical case of medial rectus rupture. The case is unusual because this is a rare injury and because the diagnosis was initially unsuspected. The options for surgical management are discussed with a review of the literature.

### Case report

A 35-year-old carpenter presented in a state of alcoholic intoxication to the Ophthalmic Accident Service following a punch to the left eye. At presentation he was noted to have a nasal conjunctival laceration, proptosis, chemosis, left exotropia and ophthalmoplegia.

One week later a fleshy mass appeared in the conjunctival tear and he was seen to have residual limitation of adduction and elevation of the left eye (Figure 1). This was initially considered to be due to an orbital haematoma and blowout fracture, but a CT scan excluded both of these diagnoses. A presumptive diagnosis of rupture of the medial rectus was therefore made. The CT scan suggested that the muscle was still partly attached to the globe.

At surgical exploration a complete rupture of the medial rectus was found close to it's insertion. The muscle had retracted within its tendon sheath, which was still attached to the globe as the CT had suggested. The fleshy mass was excised and the remaining muscle was reattached to the globe approximately 8 mm behind its original insertion. This was as anterior as possible because the muscle stump was friable and short. Histological examination of the resected tissue confirmed it to be extraocular muscle and granulation tissue.

The net effect of surgery was of a combined recession and resection of the medial rectus, with consequent loss of its mechanical advantage. However, postoperative recovery was surprisingly good with return of adduction past the midline (Figure 2). The patient has defaulted from further follow-up, but we speculate that he suffers little residual functional disability because he still works as a carpenter and therefore presumably has a useful field of binocular single vision (BSV).

#### Discussion

Injuries to the extraocular muscles have been infrequently reported<sup>1-6</sup> and are usually associated with penetrating orbital trauma or with complex orbital fractures<sup>7</sup>. The

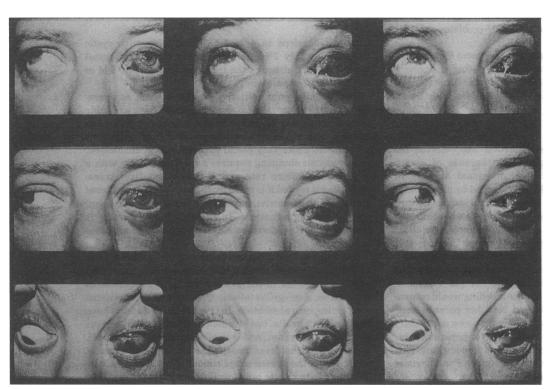


Figure 1. Cardinal positions of gaze one week after presentation with rupture of the left medial rectus muscle. A mass can be seen arising from the nasal conjunctiva of the left eye



Figure 2. Cardinal positions of gaze 4 weeks after surgical reattachment of the ruptured left medial rectus muscle

medial rectus is the most commonly injured extraocular muscle followed in order of decreasing frequency by the inferior, superior and lateral recti<sup>1</sup>; the oblique muscles are very rarely damaged.

The exact mechanism of injury is unclear in this case as the patient was intoxicated and claimed not to remember his assault, but he thought it possible that his assailant could have been wearing sharp rings or have gouged him.

Further surgical intervention, if required to alleviate diplopia, would aim to increase the field of BSV. In this case this could be achieved by recession of the left lateral rectus (ipsilateral antagonist) or by recession or 'Fadenisation' of the right lateral rectus (contralateral agonist).

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## Spontaneous regression of metastatic renal cell carcinoma

M A Palmer FRCS S Viswanath FRCS
A D Desmond FRCS Department of Urology,
Broadgreen Hospital, Thomas Drive,
Liverpool L14 3LB

Keywords: kidney; cancer; metastases

A case is reported of spontaneous regression of pulmonary metastases from renal cell carcinoma, with simultaneous development of an aggressive skin metastasis.

#### Case report

A previously fit 64-year-old man presented in acute urinary retention secondary to haematuria. Investigations including computerized tomography demonstrated a tumour in the lower pole of the left kidney and a faint opacity in the right lung base on chest X-ray. Radical nephrectomy was performed with an uneventful postoperative recovery. Histology revealed a renal cell carcinoma without infiltration of the renal capsule or vascular invasion.

Three months later, the patient had clearly deteriorated and was complaining of anorexia, malaise, a dry cough and one stone weight loss. A chest X-ray demonstrated widespread opacities in both lung fields which had the typical appearance of metastatic renal carcinoma (Figure 1). No treatment was offered.

By 7 months, his symptoms had all resolved and he had regained his preoperative weight. Repeat chest X-ray demonstrated dramatic resolution of the pulmonary metastases (Figure 2). During the period of metastatic regression, a 3 cm